

Return form to: Georgia Adopt-A-Stream
2 MLK Jr. Dr. SE
Suite 1462 East
Atlanta, GA 30334

GEORGIA ADOPT-A-STREAM Watershed Survey and Map Assessment

To be conducted at least once a year

AAS group name: _____	Investigator(s): _____
Type of waterbody: stream / wetland / lake _____	_____
Water body name: _____	County(ies): _____
Approximate size of drainage/study area: _____ acres	
Date: _____ Time: _____	Picture/photo documentation? Yes/No

I. CREATE A MAP OF YOUR WATERSHED

A copy of this map can be sent to AAS@gaepd.org to be filed with the Georgia Adopt-A-Stream state office.

II. LAND USES/ACTIVITIES AND IMPERVIOUS COVER

1. Identify land uses and activities in the watershed which have the highest potential to impact water bodies:

Check all boxes that apply, describe the location of the activity(ies) under Notes on Location & Frequency of Activities and also mark the locations on your map. If too frequently occurring to record locations, so note. If you don't know some of the information below, write DK under Notes.

Please indicate if you: surveyed only adjacent to the waterbody
 surveyed the whole watershed
Provide notes as necessary

Land Disturbing Activities & Other Sources of Sediment	Adjacent to Water	In Watershed	Notes on location & frequency of activity
Extensive areas disturbed by land development or construction of utilities, roads & bridges	<input type="checkbox"/>	<input type="checkbox"/>	_____
Large or extensive gullies	<input type="checkbox"/>	<input type="checkbox"/>	_____
Unpaved roads near or crossing streams	<input type="checkbox"/>	<input type="checkbox"/>	_____
Croplands	<input type="checkbox"/>	<input type="checkbox"/>	_____
Pastures with cattle access to water bodies	<input type="checkbox"/>	<input type="checkbox"/>	_____
Commercial forestry activities including harvesting and site-preparation	<input type="checkbox"/>	<input type="checkbox"/>	_____
Extensive areas of streambank failure or channel enlargement	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other Agricultural Activities			
Confined animal (cattle or swine) feeding operations and concentrations of animals	<input type="checkbox"/>	<input type="checkbox"/>	_____
Animal waste stabilization ponds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Poultry houses	<input type="checkbox"/>	<input type="checkbox"/>	_____
Highways and Parking Areas			
Shopping centers & commercial areas	<input type="checkbox"/>	<input type="checkbox"/>	_____
Interstate and controlled access highways and interchanges	<input type="checkbox"/>	<input type="checkbox"/>	_____
Major highways and arterial streets	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other extensive vehicle parking areas	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mining			
Quarries with sediment basins in live flowing streams	<input type="checkbox"/>	<input type="checkbox"/>	_____

Transportation and Motor Vehicle Services

Adjacent to Water

In Watershed

Notes on location & frequency of activity

Truck cleaning services

Public and private automobile repair facilities

Car washes and large auto dealers

Rail or container transfer yards

Airports with fuel handling/aircraft repair

Business & Industry, General

Activities with exterior storage or exchange of materials.

Activities with poor housekeeping practices indicated by stains leading to streams or storm drains or on-site disposal of waste materials

Heavy industries such as textiles & carpet, pulp & paper, metal, and vehicle production or fabrication

Dry cleaners/outside chemical storage

Food & Kindred Products

Fertilizer production plants

Feed preparation plants

Meat and poultry slaughtering or processing plants

Construction Materials

Wood treatment plants

Concrete and asphalt batch plants

Waste Recycling, Movement & Disposal	Adjacent to Water	In Watershed	Notes on location & frequency of activity
Junk and auto salvage yards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Solid waste transfer stations	<input type="checkbox"/>	<input type="checkbox"/>	_____
Landfills and dumps (old & active)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Recycling centers	<input type="checkbox"/>	<input type="checkbox"/>	_____
Drum cleaning sites	<input type="checkbox"/>	<input type="checkbox"/>	_____
Illicit Waste Discharges*			
Sanitary sewer leaks or failure	<input type="checkbox"/>	<input type="checkbox"/>	_____
Overflowing sanitary sewer manholes due to clogging or hydraulic overloading	<input type="checkbox"/>	<input type="checkbox"/>	_____
Bypasses at treatment plants or relief valves in hydraulically overloaded sanitary sewer lines	<input type="checkbox"/>	<input type="checkbox"/>	_____
Domestic or industrial discharges	<input type="checkbox"/>	<input type="checkbox"/>	_____
Extensive areas with aged/malfunctioning septic tanks	<input type="checkbox"/>	<input type="checkbox"/>	_____
Dry-weather flows from pipes (with detectable indications of pollution)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Streamside areas of illegal dumping	<input type="checkbox"/>	<input type="checkbox"/>	_____

* If found (most likely during stream surveys), these activities should be immediately reported to the local government or the EPD regional office. These phone numbers are listed in Chapter 4.

Optional

2. Percent impervious surface: acre overlay, example map and acreage calculating grid in Index A. Example form in Chapter 5.

Coverage category for LANDUSE MAP method	impervious quotient	times	percent of...	percent of impervious cover
Forest/open land/undeveloped land/vacant/land owned by institutions	.005	x		%
Agriculture/pasture/cropland	.005	x		%
Single family residential (1.1 - 5 acre lot or no more than 1 dwelling per acre)	.12	x		%
Single family residential (.5 - 1 acre lot or 0 – 2 dwellings per acre)	.19	x		%
Low density residential / single family residential (.25 - .5 acre lot or 0 – 4 dwelling units per acre)	.26	x		%
Low/medium density residential (.25 acre lot or smaller or 0 –8 dwelling units per acre)	.48	x		%
Medium density residential (0 –12 dwelling units per acre)	.56	x		%
High density residential (18 – 30 dwelling units per acre)	.65	x		%
Townhouse/apartment	.48	x		%
Office/light industrial (assembly, finishing, packaging products)	.70	x		%
Heavy industrial (timber, chemical, cement, brick plants, lumber mills)	.80	x		%
Commercial (business districts, commercial strip development, shopping centers, warehouses, parking lots, office buildings)	.85	x		%
Major roads	.90	x		%
	Total percent of watershed covered by impervious surfaces			%

Land use categories and quotient provided by the Atlanta Regional Commission

III. GENERAL WATERBODY AND WATERSHED CHARACTERISTICS

This information will be gathered from your wetland, lake or stream segment.

1. Note the number of hydrologic modifications on your waterbody: structures that alter water flow

None	_____	Beaver dams	_____
Dams	_____	Dredge spoils	_____
Bridges	_____	Pipes	_____
Waterfalls	_____	Other	_____

2. Note the approximate length of the stream that is affected by the following: if assessing a wetland, lake or pond, some of the following may also affect your waterbody

Stream culvert	_____ feet or _____ mile or _____ % of stream length
Stream straightening	_____ feet or _____ mile or _____ %
Concrete streambank/bottom	_____ feet or _____ mile or _____ %
Dredging/channelization	_____ feet or _____ mile or _____ %
Riprap/gabion	_____ feet or _____ mile or _____ %
Cattle crossing	_____ #
Stream crossing (for vehicles)	_____ #

3. Note extent of vegetative buffer along the banks: at a minimum of 5 sites*, at regular intervals (every 500 ft. in a 1/2 mile. section) note the following

#	Width in feet	Location (Left bank, Right bank or N, S, E, W side of wetland or lake)	Characteristics and comments
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

4. Check the categories that best describe the general appearance of the waterbody:

Litter:

- No litter visible
- Small litter occasionally (i.e., cans, paper)
- Small litter common
- Large litter occasionally (i.e., tires, pallets, shopping carts)
- Large litter common

Special Problems:

- Spills of chemicals, oil, etc.
- Fish kills
- Wildlife, waterfowl kills

Erosion:

- No bank erosion or areas of erosion very rare; no artificial stabilization
- Occasional areas of bank erosion
- Areas of bank erosion common
- Artificial bank stabilization (i.e., riprap) present

5. Comments on general waterbody and watershed characteristics: (e.g. date and size of fish kill, increased rate of erosion evident, litter most evident after storms)

* Fish kills should be immediately reported to DNR Wildlife Resources Division at 770-918-64

6. Summarize notable changes that have taken place since last year (if this is not your first year conducting the Watershed Survey).

IV. PIPE AND DRAINAGE DITCH INVENTORY

In this section, provide information on pipes and drainage ditches found on the banks or in the waterbody. These pipes/ditches can be abandoned or active. Note the information for each pipe or drainage ditch you observe. *Make additional copies as necessary.*

Pipe #	Location	Type	Size	Flow	Waterbody condition	Comments

1. **Number each pipe/ditch** for mapping/locating purposes
2. **Location of pipe/ditch:** note whether in water, bank, near waterbody or other. Describe location.
3. **Identify type of pipe (list all that apply):** PVC, iron, concrete, galvanized; industrial outfall, sewage treatment plant outfall, storm drain, combined sewer overflow; agricultural field drainage, paddock or feedlot drainage, settlement basin/pond drainage, parking lot drainage, unknown, other
4. **Size: measure approximate diameter of pipe:** inches or centimeters
5. **Describe the discharge flow:** Rate of flow: none, intermittent, trickle, steady, heavy
 Appearance: clear, foamy, turbid, oily sheen, color, other
 Odor: none, rotten eggs/sewage, chemical, chlorine, other
7. **Waterbody condition: describe the bank/waterbody below pipe or drainage ditch:** no problem evident, eroded, sewage litter (e.g. toilet paper), litter (e.g. bottles, cans), lots of algae, other
8. **Comments of pipes and drainage ditches:** Use this space to explain or expand on information provided on pipes and discharges you have identified above. For example, you may want to identify particular facilities, or discuss in more detail the condition of the waterbody below the discharge. Use separate page if necessary.